CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

1.   A system for automatically purifying solvents, comprising:

a solvent holding portion having at least one solvent stored therein;

a filter holding portion having at least one filter tube located therein;

a peripheral device; and

a computer having a memory and a processor, said processor being configured by said memory to perform the steps of:

receiving an electronic selection of a solvent to be automatically purified;

automatically causing the flow of said electronically selected solvent from said solvent holding portion to said at least one filter tube; and

automatically filling a collection vessel with said purified solvent.

2.   The system of claim 1, wherein said step of automatically filling said collection vessel is performed for a time period specified by a user of said system.

3.   The system of claim 1, wherein said filter tube removes elements selected from the group consisting of impurities, water and oxygen.

4.   The system of claim 1, wherein said received electronic selection is received from a location remote from said system.

5.   The system of claim 1, wherein said filter holding portion and said solvent holding portion are located within one common area.

6.   The system of claim 1, wherein said filter holding portion and said solvent holding portion are located within separate areas.

7.   The system of claim 1, wherein said filter holding portion has an air purification system attached thereto, said air purification system being capable of cleaning air within said filter holding portion and within said solvent holding portion.

8.   The system of claim 1, further comprising a source of working gas, and wherein said solvent is stored within a solvent container that is located within said solvent holding portion.

9.   The system of claim 8, wherein said step of automatically causing the flow of said electronically selected solvent is performed by said processor automatically causing the opening of a check valve that controls flow of said working gas into said solvent container.

10.   The system of claim 1, wherein said processor is further configured by said memory to perform the step of automatically preparing said collection vessel for receipt of said purified solvent after said step of receiving said electronic selection of said solvent.

11.   The system of claim 10, wherein said system is connected to a vacuum device capable of removing oxygen from said collection vessel, said step of automatically preparing said collection vessel, further comprising the steps of:

said processor causing opening of a vacuum valve for allowing said vacuum device to remove oxygen from said collection vessel;

said processor causing closing of said vacuum valve;

said processor causing opening of a working gas valve for allowing filling of said collection vessel with said working gas; and

said processor causing repeating of said steps of causing opening of said vacuum valve to remove said oxygen, causing closing of said vacuum valve, and causing opening of said working gas valve to fill said collection vessel with said working gas.

12.   The system of claim 11, wherein said step of automatically preparing said collection vessel is performed based upon a user provided configuration, wherein during said configuration, said user specifies a time period for removing oxygen from said collection vessel, a time period for adding said working gas to said collection vessel, and a number of times to repeat said steps of removing said oxygen and adding said working gas.

13.   The system of claim 11, wherein said processor is further configured by said memory to perform the step of briefly filling said collection vessel with said working gas after said step of automatically filling said collection vessel with said purified solvent to allow said collection vessel to be removed from said system.

14.   A method of automatically purifying solvents, comprising the steps of:

receiving an electronic selection of a solvent to be automatically purified;

automatically causing the flow of said electronically selected solvent from a solvent

container into at least one filter tube;

automatically removing unwanted elements from said electronically selected

solvent via use of said at least one filter tube, resulting in a purified solvent; and

automatically filling a collection vessel with said purified solvent.

15.   The method of claim 14, further comprising the step of receiving a solvent

fill time, wherein said step of automatically filling said collection vessel is performed for

said received solvent fill time.

16.   The method of claim 14, wherein said step of electronically selecting a

solvent to be automatically purified is performed via use of a peripheral device.

17.   The method of claim 16, wherein said peripheral device is a touch screen.

18.   The method of claim 14, wherein said step of automatically causing the flow

of said electronically selected solvent further comprises the step of adding a working gas to

said solvent container.

19. The method of claim 18, wherein said step of automatically causing the flow of said electronically selected solvent further comprises automatically opening a check valve that controls the flow of said working gas into said solvent container.

20. The method of claim 14, wherein said unwanted elements are particulate, oxygen and water.

21. The method of claim 14, further comprising the step of automatically preparing said collection vessel for receipt of a purified solvent after said step of receiving said electronic selection of said solvent.

22. The method of claim 21, wherein said step of automatically preparing said collection vessel further comprises the steps of:

removing oxygen from said collection vessel;

adding a working gas to said collection vessel; and

repeating said steps of removing said oxygen and adding said working gas.

23. The method of claim 22, wherein said step of automatically preparing said collection vessel is performed based upon a user provided configuration, wherein during said configuration, said user specifies a time period for removing oxygen from said collection vessel, a time period for adding a working gas to said collection vessel, and a number of times to repeat said step of repeating said steps of removing said oxygen and adding said working gas.

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24.   The method of claim 14, further comprising the step of automatically adding said working gas to said collection vessel after said step of automatically filling said collection vessel with said purification solvent.

25.   A system for purifying solvents, comprising:

means for receiving an electronic selection of a solvent to be automatically purified;

means for automatically causing the flow of said electronically selected solvent from a means for holding said solvent into at least one means for filtering;

means for automatically removing unwanted elements from said electronically selected solvent via use of said at least one means for filtering, resulting in a purified solvent; and

means for automatically filling a collection vessel with said purified solvent.

26.   The system of claim 25, further comprising a means for receiving a solvent fill time, wherein said means for automatically filling said collection vessel automatically fills said collection vessel for said received solvent fill time.

27.   The system of claim 25, further comprising means for adding a working gas to said means for holding said solvent.

28.   The system of claim 25, further comprising means for automatically

preparing said collection vessel for receipt of a purified solvent after receiving said

electronic selection of said solvent.